

gravelly soil, dry open woods, Beebe Lake, Ithaca, August 16, 1915, *Eames & Thomas*, no. 4067; rocky crests above Shurger's Glen, Lansing, May 15, 1916, *MacDaniels & Wiegand*, no. 6447; Lake Chautauqua, June 4, 1893, *Churchill*. NEW JERSEY: Summit, May 23, 1891, *Churchill*; river banks, Camden, June, 1876 (glabrous extreme), *Martindale*. PENNSYLVANIA: West Branch of Octoraro Creek, Lancaster Co., May 6, 1891, *Heller*; near Haines Station, Lancaster Co., May 20, 1901, *Heller*. MARYLAND: Baltimore Co., May 5, 1881, *Smith*; Watersville, May 13, 1881, *Smith*. VIRGINIA: Goshen, Rockbridge Co., May 4, 1915, *Churchill*. WEST VIRGINIA: dry woods, White Sulphur Springs, May 14-17, 1914, *Hunnewell*. NORTH CAROLINA: moist places near Salisbury, Rowan Co., April 22, 1897, *Biltmore Herb.*, no. 1229b. ONTARIO: Whirlpool Rapids, Niagara, May, 1901, *J. Macoun*, no. 33,581. OHIO: Toledo, May, 1884, *Young*. INDIANA: without statement of locality or collector. ILLINOIS: rich woods near Cottonwood Station, Urbana, April 17, 1909, *Pease*, no. 11,807; low woods near Crystal Lake, Urbana, April 27, 1909, *Pease*, no. 11,825 (smoother form); Ottawa, *Huett*; moist cleared timberland, Macon Co., May 9, 1915, *Clokey*, no. 2384. WISCONSIN: Preble, Brown Co., May 21, 1892, *Schuette*. IOWA: Marshalltown, May 15, 1897, *Ball*, no. 471; Ames, May 22, 1897, *Ball & Preston*, no. 465. MISSOURI: St. Louis, 1877, *Eggert*. KANSAS: woods, Wyandotte Co., May 3, 1897, *Hitchcock*, no. 1105.

Many of the specimens above cited have been distributed as *R. septentrionalis*, a northern species of swamps and meadows with much coarser stems and leaves and with stout and very long repent stolons developing soon after the expansion of the first flowers.

GRAY HERBARIUM.

HABENARIA PSYCODES, VAR. ECALCARATA IN VERMONT.—Last August there was sent me a peculiar orchid which had been collected by Dr. Anne E. Perkins in a meadow at Berkshire, Vt. Prof. Ames later determined it as the peloric form of *Habenaria psycodes* described, figured and named var. *ecalcarata* by Miss M. M. Bryan.¹

In this form (for it seems to be a teratological development rather than a true variety) the usual three-parted, spurred and fringed lip is replaced by an oblong-ovate, spurless petal, entire and wholly similar to the other petals, except that it occasionally bears small irregular and jagged marginal projections which remotely suggest its relationship to the normal type of lip. The result is a nearly

¹ Ann. Mo. Bot. Gard. iv. 38 (1917).

regular flower, superficially resembling that of a *Goodyera* much more than that of a *Habenaria* and reminiscent of *H. psycodes* only in color.

Miss Bryan makes no mention of the column in her description of var. *ecalcarata*; in Dr. Perkins's material, however, this organ shares the peloric tendencies of the perianth. Instead of the usual two nearly erect anther-sacs, it develops four, set at various angles in a rough half-circle about its upper part. Presumably the four sacs represent the two anthers of the simpler orchids, such as *Cypripedium*, and their arrangement, like the almost regular perianth, indicates a reversion toward a more primitive and more regular type of flower. All the sacs examined produced pollinia, but these were without distinguishable glands. The whole anterior surface of the column was strongly viscid; but I was unable to determine whether or not the stigma was fully formed and capable of performing its function.

In both Miss Bryan's and Dr. Perkins's material, all the flowers were alike, the peloria not being, as sometimes, confined to a portion of the inflorescence. Miss Bryan's specimens came from Bay View, Mich., where several plants were observed to persist for years: Dr. Perkins noted only one plant at her station. A precisely analogous form of *Habenaria fimbriata* was collected years ago by H. G. Jesup at Lynn, N. H., and described and illustrated by him, but not given a name.²—C. A. WEATHERBY, East Hartford, Conn.

POLYGALA PAUCIFOLIA Willd., forma **vestita**, n. f., foliis dense pilosis, pilis canescentibus.

Leaves densely pilose with canescent hairs.—NEW HAMPSHIRE: rich deciduous woods, northwest base of Fall Mountain, Walpole, May 26, 1917, L. A. Wheeler & M. L. Fernald (TYPE in Herb. N. E. Bot. Club).

The common form of *Polygala paucifolia* has the leaves green and quite glabrous except for a slight ciliation and sometimes a little pilosity on the midrib. Forma *vestita* is conspicuous when growing on account of its pale foliage and at Walpole forms an extensive carpet.—M. L. FERNALD, Gray Herbarium.

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² Bot. Gaz. xviii. 189-190 (1893).